L1: Entry 24 of 47 File: USPT Jun 6, 2000

DOCUMENT-IDENTIFIER: US 6071272 A
TITLE: Method for treating erectile dysfunctionality

Brief Summary Text (24):
The pharmacological agents which are suitable for the treatment of erectile dysfunctionality and which may be employed with the present invention include, but are not limited to, vasodilators such as prostagiandin E1 or E0, phosphodiesterase inhibitors, nitric oxide donors or precursors such as L-arginine, potassium channel activators, alpha-adrenergic antagonists such as phentolamine, calcium channel blockers, antidepressants, smooth muscle relaxants such as papaverine, atropine, and Maxi-K+ channel openers or gene products.

L1: Entry 27 of 47 File: USPT Jan 14, 1997

DOCUMENT-IDENTIFIER: US 5594032 A
TITLE: Amelioration of human erectile dysfunction by treatment with iNOS, inducers of iNOS or iNOS cDNA

Detailed Description Text (10):
Treatment with a sub-optimal dose of the nitric oxide synthase inhibitor N-nitro-L-arginine methyl ester (L-NAME) subsequent to treatment with the inducer significantly reduced the observed erectile response. This data demonstrates that the inducer treatment's mechanism is via the NOS cascade. That the inducer treatment works by induction of nitric oxide synthase is further demonstrated by data that the penile tissue homogenates of rats treated with inducers of iNOS showed increased NOS activity relative to untreated controls and by histochemical detection of NOS activity in penile tissue sections.

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L2: Entry 3 of 17 File: USPT Nov 5, 2002

US-PAT-NO: 6476037
DOCUMENT-IDENTIFIER: US 6476037 B1

TITLE: L-arginine and phosphodiesterase (PDE) inhibitor synergism

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wallace; Arthur W.	San Rafael	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
The Regents of the University of California	Oakland	CA			02

APPL-NO: 09/ 644982 [PALM]
DATE FILED: March 23, 2000

INT-CL: [07] A01 N 43/54

US-CL-ISSUED: 514/258; 514/262, 514/253, 514/565
US-CL-CURRENT: 514/252.17; 514/252.16, 514/262.1, 514/263.3, 514/565

FIELD-OF-SEARCH: 514/505, 514/262, 514/253, 514/258

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL | Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5767160	June 1998	Kaesemeyer	514/565
☐	5891459	April 1999	Cooke et al.	424/439
☐	5919474	July 1999	Place et al.	
☐	5958926	September 1999	Garvey et al.	514/253
☐	6071272	June 2000	Hoffman et al.	604/500
☐	6127363	October 2000	Doherty, Jr. et al.	
☐	6156753	December 2000	Doherty, Jr. et al.	
☐	6207713	March 2001	Fossel	514/565

☐	6277884	August 2001	de Tejada	515/565
☐	6284763	September 2001	Adams et al.	514/211.07
☐	6300335	October 2001	Campbell et al.	
☐	2002/0035067	March 2002	Adams et al.	514/18

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
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WO 98/58633	December 1998	WO	
WO 99/51252	October 1999	WO	
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WO 00/15233	March 2000	WO	

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ART-UNIT: 1614

PRIMARY-EXAMINER: Reamer; James H

ATTY-AGENT-FIRM: Hunter; Tom Quine Intellectual Property Law Group, P.C.

ABSTRACT:

This invention pertains to the discovery that L-arginine and type V phosphodiesterases act synergistically to inhibit vasospasm and/or to induce vasodilation. Methods are provided using combinations of L-arginine and type V

phosphodiesterase inhibitors in the treatment of cardiac pathologies and/or the treatment of erectile dysfunction.

44 Claims, 21 Drawing figures

First Hit Fwd Refs

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L2: Entry 4 of 17 File: USPT Oct 1, 2002

US-PAT-NO: 6458841
DOCUMENT-IDENTIFIER: US 6458841 B2

TITLE: Topical and oral delivery of arginine to cause beneficial effects

DATE-ISSUED: October 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fossel; Eric T.	South Hero	VT		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
New England Property Holdings, LLC	Burlington	VT			02

APPL-NO: 09/ 734096 [PALM]
DATE FILED: December 11, 2000

PARENT-CASE:
CROSS REFERENCE TO RELATED APPLICATION This is a Divisional application of U.S. Ser. No. 08/936,189, filed Sep. 17, 1997, now U.S. Pat. No. 6,207,713 the contents of which are incorporated herein by reference.

INT-CL: [07] A61 K 31/195, A61 K 6/00, A61 K 47/00, A61 K 9/127

US-CL-ISSUED: 514/565; 424/401, 424/439, 424/450
US-CL-CURRENT: 514/565; 424/401, 424/439, 424/450

FIELD-OF-SEARCH: 514/565, 424/401, 424/450, 424/439

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5595753	January 1997	Hechtman	424/436
☐	5629002	May 1997	Weuffen et al.	424/401
☐	5925372	July 1999	Berner et al.	424/448

OTHER PUBLICATIONS

Cooper et al., "Transdermal Delivery of Drugs", vol. II, editors Kydonieus and Berner, CRC Press, Inc., Boca Raton, FL, 1987, pp. 57-52. (Library of Congress Card No. 86-2585).

ART-UNIT: 1617

PRIMARY-EXAMINER: Criares; Theodore J.

ATTY-AGENT-FIRM: Lorusso & Loud

ABSTRACT:

The use of orally administered L-arginine in conjunction with a topical preparation for producing enhanced blood flow in tissue thus causing beneficial effects such as warming cold tissue of the hands and feet, promoting hair growth on bald scalp tissue, promoting healing of superficial Ilcers such as leg ulcers in persons with diabetes, and overcoming male erectile failure (impotence) is disclosed. Specifically, use of orally administered L-arginine in conjunction with this is topical preparation provides local delivery of the amino acid L-arginine, an important biological precursor to the main substance which is responsible for relaxation of blood vessels permitting enhancement of blood flow. In the preferred embodiments, the L-arginine is provided so that it can be topically applied to the cold tissue. The preparation also contains an agent which aids in the transfer of L-arginine into the tissue. In the preferred embodiments this agent overcomes the resistance to transfer caused by the high charge density of L-arginine. In the preferred embodiments this means is high ionic strength created by addition of sodium chloride. This preparation, when topically applied to cold tissue, warming begins within 10 to 45 minutes and is sustained for periods as long as 2 to 18 hours. Further this preparation when applied nightly to bald scalp tissue-for a period of time causes substantial growth of hair on the bald scalp, causes the healing of superficial ulcers such as leg ulcers and overcomes impotence.

10 Claims, 0 Drawing figures

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L2: Entry 7 of 17 File: USPT Jan 22, 2002

US-PAT-NO: 6340480
DOCUMENT-IDENTIFIER: US 6340480 B1

TITLE: Natural composition for the treatment of circulatory conditions

DATE-ISSUED: January 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duckett; Melvin J.	Sparks	MD	21152	
Moore; Kyle	Owings Mills	MD	21117	

APPL-NO: 09/ 473105 [PALM]
DATE FILED: December 28, 1999

PARENT-CASE:
CROSS-REFERENCE TO RELATED APPLICATIONS The present application is a continuation-in-part of application Ser. No. 09/255,587 for "NATURAL COMPOSITION AND METHOD FOR THE TREATMENT OF SEXUAL DYSFUNCTION"; filed: Feb. 22, 1999, now U.S. Pat. No. 6,007,824, which is in turn based on provisional application no. 60/092,143, filed Jul. 9, 1998.

INT-CL: [07] A61 K 35/78

US-CL-ISSUED: 424/728; 424/727, 424/752, 424/777, 514/565, 514/887, 514/929
US-CL-CURRENT: 424/728; 424/727, 424/752, 424/777, 514/565, 514/887, 514/929

FIELD-OF-SEARCH: 424/195.1, 424/728, 424/777, 424/752, 424/727, 514/565, 514/887, 514/929

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5861168	January 1999	Cooke et al.	424/424

ART-UNIT: 1651

PRIMARY-EXAMINER: Tate; Christopher R.

ATTY-AGENT-FIRM: Law Office of Royal W. Craig

ABSTRACT:

A composition and method for treating circulatory conditions by promoting systemic vascular relaxation and dilation. Exemplary circulatory conditions are disclosed and include wound healing and/or reduction of hypertension. The composition is a natural combination of L-arginine, ginseng and Zizyphi fructus in an orally or topically administered dosage. The combination works synergistically to synthesize NO and thereby promote systemic vascular relaxation and dilation. The mechanism works in the wound compartment to promote and sustain the wound healing process. Likewise, the combined constituents, when administered orally or topically in proper concentration, work to maintain a critical threshold level of NO in areas that cannot themselves produce it, thereby promoting systemic vascular relaxation and dilation in order to reduce hypertension.

20 Claims, 1 Drawing figures

L2: Entry 8 of 17 File: USPT Nov 27, 2001

DOCUMENT-IDENTIFIER: US 6323211 B1
TITLE: Compositions and methods for treating sexual dysfunctions

Brief Summary Text (33):
The compounds of the present invention can be administered orally, bucally, parenterally, topically or rectally in dosage unit formulations containing conventional nontoxic pharmaceutically acceptable carriers, adjuvants, and vehicles, as desired. Preferably, the compounds and/or compositions are administered orally.

Detailed Description Text (5):
A comparative Phase II double blind with double placebo, randomized and controlled single-center study was conducted to determine the efficacy of yohimbine hydrochloride and L-arginine glutamate for the treatment of male sexual dysfunction. Forty eight patients suffering from erectile dysfunction for at least 3 months were identified by a hospital's urology department. The initial evaluation of each patient included a physical examination and a questionnaire-derived sexual history. The questionnaire was self-administered, and the validated International Index of Erectile Function (IIEF) was used to measure the attributes. The median age of the patients was 57 years and none of the patients had any known sensitivity to either yohimbine or L-arginine. The patients were divided into 6 groups of 8 patients each. The overall composition of each group was as closely matched as possible.

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L2: Entry 10 of 17 File: USPT Jul 24, 2001

DOCUMENT-IDENTIFIER: US 6265420 B1
TITLE: Use of nitric oxide scavengers to treat side effects caused by therapeutic administration of sources of nitric oxide

Detailed Description Text (10):
A therapeutic "nitric oxide enhancer" is a therapeutic agent that does not release nitric oxide, but interferes with nitric oxide-related metabolic pathways, thereby indirectly enhancing the levels of nitric oxide in the body. Selective inhibitors of monophosphate (cGMP)-specific phosphodiesterase type 5, the enzyme that breaks down cGMP, are a category of nitric oxide enhancers used to induce smooth muscle relaxation and inflow of blood to the corpus cavernosum, resulting in penile erection. One such therapeutic agent administered in treatment of sexual dysfunction, is sildenafil citrate (Viagra.RTM., Pfizer Corporation). Although effective for the treatment of erectile dysfunction, sildenafil citrate has undesirable side effects, such as headache, hypotension and dyspepsia, particularly when used by patients taking another nitric oxide source, such as an organic nitrate drug. Other conditions treated by nitric oxide enhancers include impotence, angina and congestive heart failure, acute respiratory distress syndrome, and the like. Additional examples of nitric oxide enhancers whose undesirable side effects can be treated by the invention method include acetylcholine, heparin, calcium ion, arginine, and the like, and combinations of two or more thereof.

Detailed Description Text (59):
The nitric oxide source and the nitric oxide scavenger in the invention formulations and/or kits can be independently contained within a suitable vehicle rendering said formulation amenable to oral delivery, transdermal delivery, intravenous delivery, intramuscular delivery, topical delivery, nasal delivery, and the like.

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L2: Entry 11 of 17 File: USPT Mar 27, 2001

DOCUMENT-IDENTIFIER: US 6207713 B1
TITLE: Topical and oral delivery of arginine to cause beneficial effects

Abstract Text (1):
The use of orally administered L-arginine in conjunction with a topical preparation for producing enhanced blood flow in tissue thus causing beneficial effects such as warming cold tissue of the hands and feet, promoting hair growth on scalp tissue lacking sufficient hair, promoting healing of superficial ulcers such as leg ulcers in persons with diabetes, and overcoming male erectile failure (impotence) is disclosed. Specifically, use of orally administered L-arginine in conjunction with this is topical preparation provides local delivery of the amino acid L-arginine, an important biological precursor to the main substance which is responsible for relaxation of blood vessels permitting enhancement of blood flow. In the preferred embodiments, the L-arginine is provided so that it can be topically applied to the cold tissue. The preparation also contains an agent which aids in the transfer of L-arginine into the tissue. In the preferred embodiments this agent overcomes the resistance to transfer caused by the high charge density of L-arginine. In the preferred embodiments this means is high ionic strength created by addition of sodium chloride. This preparation, when topically applied to cold tissue, warming begins within 10 to 45 minutes and is sustained for periods as long as 2 to 18 hours. Further this preparation when applied nightly to scalp tissue lacking sufficient hair for a period of time causes substantial growth of hair on the scalp lacking sufficient hair, causes the healing of superficial ulcers such as leg ulcers and overcomes impotence.

Brief Summary Text (3):
This invention relates to the use of L-arginine orally alone or in conjunction with topical application of a cream, gel, or other vehicle which contains substances such as L-arginine which delivers these substances into tissue for the purpose of producing beneficial effects such as warming of cold or cool tissues, growth of hair on the scalp, healing of leg ulcers secondary to diabetes or confinement to bed, relief of impotence, as well as beneficial effects through restoration of natural mechanisms based on improvement of local blood supply.

Brief Summary Text (5):
Approaches to improving local blood flow have been many and consist of both systemic and topical approaches. Many beneficial effects could be obtained should improvement in local blood flow be achieved since impairment of local blood flow causes a variety of negative consequences. Among these are cold hands and feet, lack of sufficient hair on the scalp, leg ulcers, certain forms of impotence, as well as a variety of other things. Approaches to warming cold tissue including cold hands, fingers, feet and toes constitute one section of the prior art. Many persons suffer from cold hands, feet or other body parts. This is often caused by insufficient blood flow in the cold tissue. Previously cold hands or feet have been treated by wearing warm socks or gloves, sometimes even socks or gloves which are mechanically heated. The use of hot packs and glove or shoe inserts which generate heat through chemical reactions has also been a potential solution. Certain liniments which are essentially irritants, such as those containing the red pepper derived substance, capsicum fall into this category. More recently, topical creams containing nitroglycerine have been used. See H. Natsuda et al., Ryumachi 34, 849

(1994). All of these approaches work at one level or another though are often extremely transient in nature. Nitroglycerine creams also have the disadvantage that nitroglycerine is a cardioactive drug, raising concerns of effects on the heart.

Brief Summary Text (6):
It has been recognized that deficiencies in blood flow in the scalp occur in male pattern baldness. See G. Duplechain et al., J. Lousiana State Med Soc. 146, 7 (1994); P Klemp et al., J Invests Dermatol 95, 725 (1989); S Toshitani et al., J Dermatol 17, 240 (1990). Topical minoxidil has been used as an agent for hair growth in male pattern baldness with varying results. Though the suggestion has been made that minoxidil operates through increase in the blood supply to the scalp, many investigators have failed to show such an effect See E de Boer et al., Acta Dermato-Venereoligica 68, 271 (1988); C Bunker et al., British J Derm 117, 668 (1987).

Brief Summary Text (9):
It has long been recognized that impaired blood flow to the penis is a major cause of erectile failure (impotence) in men. See A Moradian et al. Am J. Med 85, 748, (1988); T Hwang et al. J Formosan Med Assoc 89, 992(1990). Further it has been recognized by using isolated tissue in vitro and in animal experiments that nitric oxide is an important mediator of relaxation of the vessels in penile cavernous tissue. See H Kirkeby et al. Acta Physiol Scand 149, 385 (1993). Topical nitroglycerine has been used in the treatment of impotence because of its ability to dilate vessels. The results were inconclusive and the treatment not well tolerated because of the cardiac response to nitroglycerine. See S Negelev J Urology 143, 586 (1990).

Brief Summary Text (10):
It was discovered that topical application of the nitric oxide precursor, L-arginine, in its various forms including orally alone or in conjunction with a variety of topical preparations, either by themselves or with other agents to aid in penetration such as a high ionic strength environment, neutralization of its charge in a complex or by other means, or included in a liposome or other biological carrier, when administered to cold or cool tissue causes a substantial and prolonged warming effect in the tissue, grow hair on hair-depleted scalp, facilitate healing of superficial ulcers such as leg ulcers and overcome impotence in many subjects.

Brief Summary Text (18):
In preferred embodiments, the oral delivery vehicles are capsules or tablets containing L-arginine used alone or in conjunction with a topical delivery vehicle such as a penetrating cream. In the cream the L-arginine is present as L-arginine hydrochloride in a concentration sufficient to produce the desired effect and the agent which creates the hostile biophysical environment is sodium chloride at a concentration sufficient to aid in tissue absorption.

Brief Summary Text (27):
A variety of means for effecting absorption of the active agent from the topical cream might be envisioned. One principle behind the absorption of a highly charged molecule such as L-arginine into tissue is to either create a biophysically hostile environment in the delivery vehicle such that L-arginine would prefer to be in tissue, or to package L-arginine in such a way that it is carried into tissue or neutralize its charge by derivitization or forming a neutral salt. Examples of biophysically hostile environments, include but are not limited to, high ionic strength, high or low pH, and highly hydrophobic environments. Examples of packaging which would be carried into tissue includes liposomes or emulsions of collagen, collagen peptides or other components of skin or basement membrane. Examples of neutralization of charge include the salt, arginine glutamate which is electronically neutral.

CLAIMS:

4. A method of increasing local blood flow by delivering a nitric oxide releasing substance selected from a member of the group consisting of L-arginine, L-arginine salts and L-arginine derivatives comprising the step of orally administering to the body a delivery vehicle for the substance, said delivery vehicle containing an effective amount of the substance and a concentration of ionic salt sufficient to create a hostile biophysical environment which causes the substance to migrate from said delivery vehicle to the surrounding tissue where it is absorbed in conjunction with the step of topically applying a topical delivery vehicle containing an effective amount of the substance and a concentration of ionic salt sufficient to create a hostile biophysical environment which causes the substance to migrate from the vehicle to the selected area of skin where the substance is absorbed by tissue.

5. The method of claim 4 wherein the topical delivery vehicle is selected from a member of the group consisting of topical creams, topical liquids, topical lotions and topical ointments.

6. The method of claim 4 wherein the topical delivery vehicle that is applied to the skin is hydrophobic.

7. The method of claim 4 wherein a transdermal patch containing the topical delivery vehicle is applied to the skin.

8. The method of claim 4 wherein a delivery vehicle that is orally administered comprises L-arginine (0.5-30 g/day), and the topical delivery vehicle that is applied to the skin comprises water (20-80%), mineral oil (3-18%), glyceryl stearate (0.5-12%), squalene (0.2-12%), cetyl alcohol (0.1-11%), propylene glycol stearate (0.1-11%), wheat germ oil (0.1-6%), glyceryl stearate (0.1-6%), isopropyl myristate (0.1-6%), stearyl stearate (0-6%), polysorbate 60 (0.1-50%), propylene glycol (0.05-5%), tocopherol acetate (0.05-5%), collagen (0.05-5%), sorbitan stearate (0.5-5%), vitamin A&D (0.02-4%), triethanolamine (0.01-4%), methylparaben (0.01-4%), aloe vera extract (0.01-4%), imidazolidinyl urea (0.01-4%), propylparaben (0.01-4%), bha (0.01-4%), L-arginine hydrocholide (0.25% to 25%), sodium chloride (0.25% to 25%), and magnesium chloride (0.25% to 25%).

9. The method of claim 8 wherein the topical delivery vehicle further comprises choline chloride (0.25-25%).

10. The method of claim 8 wherein the topical delivery vehicle further comprises L-arginine glutamate (0.25-25%).

11. A method of increasing local blood flow by delivering a nitric oxide releasing substance selected from a member of the group consisting of L-arginine, L-arginine salts and L-arginine derivatives comprising the step of orally administering to the body a delivery vehicle for the substance, said delivery vehicle containing an effective amount of the substance and a concentration of ionic salt sufficient to create a hostile biophysical environment which causes the substance to migrate from said delivery vehicle to the surrounding tissue where it is absorbed, in conjunction with the step of topically applying a topical delivery vehicle containing an effective amount of the substance within a liposome, so that the liposome containing the substance migrates from the delivery vehicle into the skin where the substance is absorbed by tissue.

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Search Results - Record(s) 1 through 17 of 17 returned.

☐ 1. Document ID: US 6596733 B2

Using default format because multiple data bases are involved.

L2: Entry 1 of 17 File: USPT Jul 22, 2003

US-PAT-NO: 6596733
DOCUMENT-IDENTIFIER: US 6596733 B2

TITLE: Use of nitric oxide scavengers to treat side effects caused by therapeutic administration of sources of nitric oxide

DATE-ISSUED: July 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lai; Ching-San	Encinitas	CA		

US-CL-CURRENT: 514/310; 514/492, 514/499, 514/501, 514/502

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 2. Document ID: US 6548087 B1

L2: Entry 2 of 17 File: USPT Apr 15, 2003

US-PAT-NO: 6548087
DOCUMENT-IDENTIFIER: US 6548087 B1

TITLE: Nutritional supplement

DATE-ISSUED: April 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kent; Frances B.	Highland Park	IL	60035	
Birnholz; Jason C.	Highland Park	IL	60035	

US-CL-CURRENT: 424/728; 424/643, 514/178, 514/355, 514/356, 514/561

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 3. Document ID: US 6476037 B1

L2: Entry 3 of 17 File: USPT Nov 5, 2002

US-PAT-NO: 6476037
DOCUMENT-IDENTIFIER: US 6476037 B1

TITLE: L-arginine and phosphodiesterase (PDE) inhibitor synergism

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wallace; Arthur W.	San Rafael	CA		

US-CL-CURRENT: 514/252.17; 514/252.16, 514/262.1, 514/263.3, 514/565

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

☐ 4. Document ID: US 6458841 B2

L2: Entry 4 of 17 File: USPT Oct 1, 2002

US-PAT-NO: 6458841
DOCUMENT-IDENTIFIER: US 6458841 B2

TITLE: Topical and oral delivery of arginine to cause beneficial effects

DATE-ISSUED: October 1, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fossel; Eric T.	South Hero	VT		

US-CL-CURRENT: 514/565; 424/401, 424/439, 424/450

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

☐ 5. Document ID: US 6436997 B1

L2: Entry 5 of 17 File: USPT Aug 20, 2002

US-PAT-NO: 6436997
DOCUMENT-IDENTIFIER: US 6436997 B1

TITLE: Endogenous nitric oxide synthesis under conditions of low oxygen tension

DATE-ISSUED: August 20, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
de Tejada; Inigo Saenz	Madrid			ES

US-CL-CURRENT: 514/565

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 6. Document ID: US 6387890 B1

L2: Entry 6 of 17 File: USPT May 14, 2002

US-PAT-NO: 6387890
DOCUMENT-IDENTIFIER: US 6387890 B1

TITLE: Compositions and methods for inhibiting arginase activity

DATE-ISSUED: May 14, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Christianson; David	Media	PA		
Baggio; Ricky	Waltham	MA		
Elbaum; Daniel	Newton	MA		

US-CL-CURRENT: 514/64; 562/7

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 7. Document ID: US 6340480 B1

L2: Entry 7 of 17 File: USPT Jan 22, 2002

US-PAT-NO: 6340480
DOCUMENT-IDENTIFIER: US 6340480 B1

TITLE: Natural composition for the treatment of circulatory conditions

DATE-ISSUED: January 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Duckett; Melvin J.	Sparks	MD	21152	
Moore; Kyle	Owings Mills	MD	21117	

US-CL-CURRENT: 424/728; 424/727, 424/752, 424/777, 514/565, 514/887, 514/929

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 8. Document ID: US 6323211 B1

L2: Entry 8 of 17 File: USPT Nov 27, 2001

US-PAT-NO: 6323211
DOCUMENT-IDENTIFIER: US 6323211 B1

TITLE: Compositions and methods for treating sexual dysfunctions

DATE-ISSUED: November 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Garvey; David S.	Dover	MA		
Schroeder; Joseph D.	Boston	MA		
de Tejada; Inigo Saenz	Madrid			ES

US-CL-CURRENT: 514/280; 424/400, 424/43, 424/440, 514/545, 514/754, 514/929, 514/968, 546/50

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 9. Document ID: US 6277884 B1

L2: Entry 9 of 17 File: USPT Aug 21, 2001

US-PAT-NO: 6277884
DOCUMENT-IDENTIFIER: US 6277884 B1

TITLE: Treatment of sexual dysfunction with N-hydroxyguanidine compounds

DATE-ISSUED: August 21, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
de Tejada; Inigo Saenz	Madrid			ES

US-CL-CURRENT: 514/565

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 10. Document ID: US 6265420 B1

L2: Entry 10 of 17 File: USPT Jul 24, 2001

US-PAT-NO: 6265420
DOCUMENT-IDENTIFIER: US 6265420 B1

TITLE: Use of nitric oxide scavengers to treat side effects caused by therapeutic administration of sources of nitric oxide

DATE-ISSUED: July 24, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lai; Ching-San	Encinitas	CA		

US-CL-CURRENT: 514/310; 514/492, 514/499, 514/501, 514/502

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 11. Document ID: US 6207713 B1

L2: Entry 11 of 17 File: USPT Mar 27, 2001

US-PAT-NO: 6207713
DOCUMENT-IDENTIFIER: US 6207713 B1

TITLE: Topical and oral delivery of arginine to cause beneficial effects

DATE-ISSUED: March 27, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fossel; Eric T.	S. Hero	VT	05486	

US-CL-CURRENT: 514/565; 424/401, 424/439, 424/450

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 12. Document ID: US 6191156 B1

L2: Entry 12 of 17 File: USPT Feb 20, 2001

US-PAT-NO: 6191156
DOCUMENT-IDENTIFIER: US 6191156 B1

TITLE: Compositions and methods for treating bladder dysfunction

DATE-ISSUED: February 20, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kifor; Imre	Methuen	MA		
Williams; Gordon	Belmont	MA		
Sullivan; Maryrose P.	Quincy	MA		

US-CL-CURRENT: 514/381; 514/15, 514/16, 514/303, 514/311, 514/316, 514/327, 514/328

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 13. Document ID: US 6071272 A

L2: Entry 13 of 17 File: USPT Jun 6, 2000

US-PAT-NO: 6071272
DOCUMENT-IDENTIFIER: US 6071272 A

TITLE: Method for treating erectile dysfunctionality

DATE-ISSUED: June 6, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoffman; Alan S.	Houston	TX	77096	
Tripp; Benjamin	Boca Raton	FL	33433	

US-CL-CURRENT: 604/500; 604/68, 604/70

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 14. Document ID: US 5773020 A

L2: Entry 14 of 17 File: USPT Jun 30, 1998

US-PAT-NO: 5773020
DOCUMENT-IDENTIFIER: US 5773020 A

TITLE: Treatment of erectile dysfunction

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Place; Virgil A.	Kawaihae	HI		
Gale; Robert M.	Los Altos	CA		
Berggren; Randall G.	Livermore	CA		

US-CL-CURRENT: 424/426; 424/435

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 15. Document ID: US 5594032 A

L2: Entry 15 of 17 File: USPT Jan 14, 1997

US-PAT-NO: 5594032
DOCUMENT-IDENTIFIER: US 5594032 A

TITLE: Amelioration of human erectile dysfunction by treatment with iNOS, inducers

of iNOS or iNOS cDNA

DATE-ISSUED: January 14, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gonzalez-Cadavid; Nestor F.	Pasadena	CA	91107	
Rajfer; Jacob	Rolling Hills Estates	CA	90274	

US-CL-CURRENT: 514/645; 435/195, 435/212, 435/226, 435/228, 514/740, 530/395

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 16. Document ID: US 5439938 A

L2: Entry 16 of 17 File: USPT Aug 8, 1995

US-PAT-NO: 5439938
DOCUMENT-IDENTIFIER: US 5439938 A
**** See image for Certificate of Correction ****

TITLE: Treatments for male sexual dysfunction

DATE-ISSUED: August 8, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Snyder; Solomon H.	Baltimore	MD		
Burnett; Arthur L.	Baltimore	MD		
Lowenstein; Charles J.	Tacoma Park	MD		
Bredt; David S.	Baltimore	MD		
Chang; Thomas S. K.	Baltimore	MD		

US-CL-CURRENT: 514/565

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 17. Document ID: FR 2827604 A1, WO 2003008407 A2

L2: Entry 17 of 17 File: DWPI Jan 24, 2003

DERWENT-ACC-NO: 2003-335305
DERWENT-WEEK: 200332
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TITLE: New 3-phenyl-1-(phenylsulfonyl)-1,3-dihydro-2H-indol-1-one derivatives, are arginine-vasopressin and/or oxytocin receptor ligands useful e.g. for treating cardiovascular or central nervous system disorders

INVENTOR: GARCIA, G; ROUX, R ; SCHOENTJES, B ; SERRADEIL, L C ; TONNERRE, B ; WAGNON, J ; DI MALTA, A ; SERRADEIL-LE GAL, C

PRIORITY-DATA: 2001FR-0010359 (July 17, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
FR 2827604 A1	January 24, 2003		102	C07D401/14
WO 2003008407 A2	January 30, 2003	F	000	C07D401/12

INT-CL (IPC): A61 K 31/496; A61 P 13/00; C07 D 401/12; C07 D 401/14; C07 D 403/12; C07 D 209:34; C07 D 213:72; C07 D 295:04; C07 D 401/14

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Terms	Documents
L1 and topical$	17

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L4: Entry 6 of 8 File: USPT Jul 24, 2001

DOCUMENT-IDENTIFIER: US 6265420 B1
TITLE: Use of nitric oxide scavengers to treat side effects caused by therapeutic administration of sources of nitric oxide

Detailed Description Text (10):
A therapeutic "nitric oxide enhancer" is a therapeutic agent that does not release nitric oxide, but interferes with nitric oxide-related metabolic pathways, thereby indirectly enhancing the levels of nitric oxide in the body. Selective inhibitors of monophosphate (cGMP)-specific phosphodiesterase type 5, the enzyme that breaks down cGMP, are a category of nitric oxide enhancers used to induce smooth muscle relaxation and inflow of blood to the corpus cavernosum, resulting in penile erection. One such therapeutic agent administered in treatment of sexual dysfunction, is sildenafil citrate (Viagra.RTM., Pfizer Corporation). Although effective for the treatment of erectile dysfunction, sildenafil citrate has undesirable side effects, such as headache, hypotension and dyspepsia, particularly when used by patients taking another nitric oxide source, such as an organic nitrate drug. Other conditions treated by nitric oxide enhancers include impotence, angina and congestive heart failure, acute respiratory distress syndrome, and the like. Additional examples of nitric oxide enhancers whose undesirable side effects can be treated by the invention method include acetylcholine, heparin, calcium ion, arginine, and the like, and combinations of two or more thereof.

Detailed Description Text (59):
The nitric oxide source and the nitric oxide scavenger in the invention formulations and/or kits can be independently contained within a suitable vehicle rendering said formulation amenable to oral delivery, transdermal delivery, intravenous delivery, intramuscular delivery, topical delivery, nasal delivery, and the like.

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L4: Entry 8 of 8 File: EPAB Mar 25, 1999

DOCUMENT-IDENTIFIER: WO 9913717 A1
TITLE: A DELIVERY OF ARGININE TO CAUSE BENEFICIAL EFFECTS

Abstract Text (1):
CHG DATE=19990905 STATUS=O>A delivery vehicle and method for delivering, either topically or orally, a nitric oxide releasing substance such as L-arginine 31 into human or mammalian tissue for the purpose of producing beneficial effects such as the relief of pain, the warming of cold tissues, the growth of hair on the scalp, the healing of leg ulcers, the relief of impotence as well as other beneficial effects. The delivery vehicle provides a hostile biophysical environment which facilitates and promotes the migration of the nitric oxide releasing substance into the tissue.

WEST Search History

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DATE: Tuesday, January 13, 2004

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	DB=USPT,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR		
☐	L4	L3 and topical$	8
☐	L3	$arginine same impoten$	26
☐	L2	L1 and topical$	17
☐	L1	$arginine same erectile	47

END OF SEARCH HISTORY